Release Notes
IFPS14.2
(News You Can Use)
August 22, 2003

2.0   Introduction   [Return to Top]

This section of the IFPS14.2 Release Notes highlights:

- Any special problems along with any existing work arounds
- Any FYI items associated with this Release

2.1   Phase II: Service Backkup   [Return to Top]

NOTE: Presently, Phase II: Service Backup **should only be attempted with another IFPS14 site** (i.e., Phase II**:**   Service Backup is not presently backward compatible).

2.2   Known Problems and Workarounds   [Return to Top]

- **SPR4653 / FR1062**
  - **Title:** IFPS: IGR fails to display new zone after CWA change
  - **Description of Problem:** After adding a new zone to the CWA Change script, the new zone may fail to be displayed in IGR. Awarning message will pop up saying there is "missing information", and the log file will report "UGC ssZnnn in geography list but is not in border points file" (where ssZnnn=the new zone's UGC)..
  - **Work Around:** The zone is in fact in the borderpoints file that IGR uses (brdrpts_zone.ccc). Since intersite coordination is no longer part of IGR, the brdrpts_zone_local.ccc file may be used instead. The borderpoints file used by IGR is defined in the IGR_ccc file, found in the '/awips/adapt/ifps/Xdefaults directory. Modify the igr_ccc "borderptfile resource to point to the brdrpts_zone_local file.
  - **Reporting Site:** N/A

- http://www-md.fsl.noaa.gov/eft/ifps14doc/onlinehelp/CHANGES_BUGS_FIXES_HIGHLIGHTS.html#e_knownBugs

- http://www-md.fsl.noaa.gov/eft/ifps14doc/onlinehelp/README.html
  - CS017 - Enabling Slider Bar smart inits is normally done through the ../etc/SITE/localConfig.py file with these entries:

    from serverConfig import *
    import serverConfig
    serverConfig.EnableSliderSB = YES

    This does not work. The workaround is to modify the .../etc/BASE/serverConfig.py file and change the line that reads:

    EnableSliderSB = NO
    to
    EnableSliderSB = YES

- **df012 - purge parameters for Daily Forecast Critique:** No workaround at present. More investigation whether this is a real error or not is required by FSL.
- **pg018 - smooth clipping of WEATHER images by ifpIMAGE:** No workaround at present. Performing a smooth clipping results in solid patterns, rather than the desired fill pattern.
- **pg023 - Accessing previous versions of model databases for ifpIMAGE doesn't work correctly:** The software works backwards. The correct definition is to refer to version 0 for the newest model run, 1 for the next model run, 2 for the next older model run.   The software is treating the number backwards such that 0 is the oldest, 1 is the next oldest, and so forth. The workaround is to determine the number of model databases that you have, and then count from the oldest to the newest to determine the appropriate number to use.
- **ps004, ps005 - -u switch for the publishGFE and sendISC programs is not implemented:**   The -u switch changes the user from the login userid to that specified on the command line. These are utility

programs that are not frequently used. The -u switch is typically only used when a particular selection time range is not accessible from the SITE user. **No workaround.**

2.3   CWA Change "Slash Code" Fix   [Return to Top]

The **CWA Change "Slash Code" Fix** information below is also online and available at:

*   http://www.nws.noaa.gov/mdl/icwf/IFPS14/zncode_fix.html

CWA Change "Slash Code" Fix

Introduction

When changes occur to a WFO's area of responsibility, IFPS and WWA must be updated to recognize the changes. Whether the change is the addition of zones/counties, the removal of zones/counties, zones/counties moving from one WFO to another, or simply redrawing some zone/county boundaries, the change is typically made in IFPS/WWA via the CWA Change scripts.

The CWA Change script, accessible via the main IFPS Config GUI, updates several tables in the IFPS and WWA databases, then recreates maps that are used by such applications as WWA, IGR, ICS, Georemapper, and config_geo. It was recently noticed that when the CWA Change scripts add a new zone to the geography_directry table in the IFPS database, there is a slight formatting error that can result in problems running the SAF formatter.

It's currently expected that this only happens when adding a new zone for an adjacent office (not your own WFO), although that hasn't been confirmed yet.

This document will describe how to correct the formatting error in the geography_directry database table. The three basic steps are unloading the existing data, editing the data in the editor of your choice, then loading the corrected data back in the database.

If you have any questions, please contact the NCF/SST for assistance.

The zncode

First, a little background...

The geography_directry contains information such as the lat/lon, name, and ID of every public zone/county/fwx zone/marine zone/station/state/NWR tower in the local office's area of responsibility...plus those from neighboring WFOs. When new zones and counties are added to the geography_directry as part of the CWA Change process, each zone/county is assigned a "zone code" (more commonly known as a "slash code"). For zones, they look similar to /13 or /A65. For counties, they look similar to #13 or #A65. These slash codes are typically used in WRK products. Software then uses those codes to generate the headers in the final product, converting the slash codes to UGCs/FIPS and names.

The software expects that all zncodes for zones begin with a slash "/"...and that all zncodes for counties begin with a pound sign "#". When they don't begin with those characters, it's possible that the software could fail to recognize one or more zncodes. This may manifest itself in several ways, the most common of which is the failure to properly create an SAF product.

The Identification

The best way to identify and fix the erroneous zncodes is through the use of dbaccess. What follows are instructions on how to accomplish this.

- On ds1, log in as user awipsusr
- Type the following:
    - dbaccess ifps_ccc (where ccc=wfo ID)
    - [Q]uery Language
    - [N]ew
    - unload to "/tmp/zdir.unl" select * from geography_directry where zcs_id='Z' order by zncode;
    - unload to "/tmp/cdir.unl" select * from geography_directry where zcs_id='C' order by zncode;
    - <esc>
    - [R]un
    - [E]xit, twice
- cd /tmp
- Using your favorite editor, edit /tmp/zdir.unl
- Look at the first few lines of the file. It should look similar to:

DCZ001|Z|/1|District of Columbia||District of
Columbia|EST5EDT|0|||||38.889999|77.019997|0|0|
MDZ002|Z|/2|Allegany||Maryland|EST5EDT|0|||||39.580002|78.690002|0|0|
MDZ003|Z|/3|Washington||Maryland|EST5EDT|0|||||39.52|77.720001|0|0|

Pay attention to the third column (highlighted in RED above) -- that's the zncode.

If everything is fine at your office, you'll notice normal looking slash codes, as seen above. If the CWA Change scripts put erroneous zncodes in your database,
you'll see something similar to below:

DCZ001|Z|532|District of Columbia||District of Columbia|EST5EDT|0|||||38.889999|77.019997|0|0|
MDZ002|Z|533|Allegany||Maryland|EST5EDT|0|||||39.580002|78.690002|0|0|
MDZ003|Z|534|Washington||Maryland|EST5EDT|0|||||39.52|77.720001|0|0|

or

DCZ001|Z|^H736|District of Columbia||District of Columbia|EST5EDT|0|||||38.889999|77.019997|0|0|
MDZ002|Z|^H737|Allegany||Maryland|EST5EDT|0|||||39.580002|78.690002|0|0|
MDZ003|Z|^H738|Washington||Maryland|EST5EDT|0|||||39.52|77.720001|0|0|

The actual values aren't that important...you're looking for either a control character at the beginning of the zncode and/or the absence of a slash. If you see either of those types of entries, read on. Otherwise, you may skip to the **Cleanup** section.

The Fix

The erroneous zncodes must be changed to a normal slash code. Fortunately, all of the bad entries will be right at the top of your file, so you won't have to worry about overlooking any.

Typically, slash codes consist of a slash followed by 1-3 characters (e.g., /5 or /D10). The local office's slash codes will be /n (where n=a **unique** 1-3 digit number). Neighboring offices' slash codes typically look like /Xn (where X=a letter; n=a **unique** number) The letter is usually WFO-specific (i.e., all zones belonging to a particular neighboring WFO use the same letter) or it's state-specific (i.e., all zones within a particular state use the same letter).

It is important to note that the zncodes:

- MUST begin with a slash for zones, pound sign for counties

- Are arbitrary
- MUST be unique

Since many pieces of software depend on matching the slash code to the UGC, two zones with the exact same slash code results in ambiguity. However what follows the slash (pound) may be any alphanumeric characters (1-3 in length).

- In "The Identification" section, the second and third examples are in error because the zncode has no slash code. The fix is to edit the zdir.unl file you unloaded from the database and make sure all erroneous entries begin with a slash **and** are unique. Since the file is ordered by zncode, it will make it easier to prevent duplicate zncodes.

When you're done with the zdir.unl file, repeat the edits for the cdir.unl file, this time making sure there are pound signs (#) instead of slashes in front of the zncodes.
In most cases there won't be any problems in the cdir.unl file, but it's best to check to be safe.

IMPORTANT -- Before the next step, make sure all instances of the IFPS and WWA are shut down. It will only take a couple of minutes to make the changes.

- On ds1, as user awipsusr
- Type the following:
  - dbaccess ifps_ccc (where ccc=wfo ID)
  - [Q]uery Language
  - [N]ew
  - delete from geography_directry where zcs_id='Z';
  - load from "/tmp/zdir.unl" insert into geography_directry;
  - <esc>

- o   [R]un
- o   [N]ew
- o   delete from geography_directry where zcs_id='C';
- o   load from "/tmp/cdir.unl" insert into geography_directry;
- o   <esc>
- o   [R]un
- o   [N]ew
- o   delete from wyyyymmddcc where source='working'; (where yyyymmddcc = the current forecast cycle)
- o   <esc>
- o   [R]un
- o   [E]xit, twice

After performing the above SQL, your IFPS should be ready to create SAF products once again. No server restarts are required. Users are free to launch IFPS/WWA once again.

The Cleanup

Don't forget to clean up after yourself! Delete the two temporary files we created:

rm /tmp/zdir.unl /tmp/cdir.unl

2.4   Sending IFPS gridded data to AvnFPS functionality to become available with AvnFPS2.0 delivery   [Return to Top]

'**/awips/adapt/avnfps/data/grids**' the directory needed by the avn_unldr to send gridded data from IFPS to AvnFPS **is not** created with the installation of AvnFPS1.0, but will be created with the installation of AvnFPS2.0. Therefore, until AvnFPS2.0 becomes available and is installed, any IFPS->AvnFPS tests or check-out procedures for IFPS14.2 alpha sites will

fail.

2.5   EXTENDED_FWT Environmental Variable   [Return to Top]

In the ifps-ccc.env file, there is a new environmental variable called
EXTENDED_FWT. For now, in order to retain functionality of the FWT
product, the value assigned to this variable needs to remain at zero (i.e., 0).
EXTENDED_FWT will be able to take on values other than zero starting in
IFPS15.

2.6   Installation Caveats   [Return to Top]

When a site installs IFPS14.2, the server will find databases that do not
conform to the new standard and, consequently, get rid of them. The server
will then create the new ones.

This brings up the following two issues for your consideration:

1.   The bad databases are moved to the /awips/GFESuite/BAD directory.
       That will take up considerable disk space. The site should go into this
       directory and delete all files. An example of the filenames that will be
       found in this directory is:
       BADDB-yyyymmdd_hhmm-BOU_GRID__Fcst_00000000_0000.cdf,
       where the file extension may vary, the yyyymmdd_hhmm is the time
       that the file was moved to this location, and the
       BOU_GRID__Fcst_00000000_0000 is the database identifier. **Failure
       to remove these files could consume up to 4 GB of disk space!**
2.   The install procedure only saves the contents of the Fcst database and
       deletes the other databases. If sites have precious data in other
       databases, such as GeoWeights or local climatological databases, then
       the site needs to use ifpnetCDF, before the install, to preserve a copy of

the data, and then use iscMosaic, after the install to restore the data.

2.7   Problem with RPP21.1 Patch 3058   [Return to Top]

PROBLEM: When using the local ZFP formatter with FSL patch 3058 applied, the error "AttributeError: 'module' object has no attribute 'getHolidayLabel'" is returned. This is due to a SITE-level override of the Holidays Text Utility that is not compatible with IFPS 14.x (all sites who use local text formatters were advised several months ago to perform this override).

SOLUTION: Log into GFE as user SITE and delete the Holidays Text Utility. From the GFE menu, select Define Text Products. Under the Utilities column on the right, right-click on the Holidays item and select Delete. There will be a version in BASE remaining that is compatible with IFPS 14.x.

2.8   Note for sites using Synopses and Outlooks in CWF or GLF [Return to Top]

After installing IFPS14.2, it is important that you remove old copies of wcwf.bat and wglf.bat from the /awips/adapt/ifps/localbin directory. Old copies of these scripts contained calls to restore_synopsis_zone_code.bat and remove_synopsis_zone_code.bat.   When these scripts run, they insert the synopsis and outlook entries into cwf_zones list, but do not remove them after prod_hdr runs. This causes the synopsis and outlook zones to be entered into the c-table, which causes problems when trying to run ICS and IGR.   If either of these scripts is run, use the following steps to clean up the database.

1.   Correct the geo_groups table In the geo_groups table, there should be no entries in the cwf_zones or glf_zones lists for synopses or outlooks. If there are, these entries should be removed. If it doesn't already exist, create a list called

"mar_syn_zones" (spelling is important) and populate it with either the cwf or glf zones and the synopsis and outlook entries.

2.   Clean up the c-tables The problems that occur when trying to open ICS or IGR come from the synopsis or outlook entries in the c-table. Run the following command in dbaccess to delete these entries: delete from cYYYYMMDDCC where arrangement="cwf_combo_map" where YYMMDDCC is the current year, month, day, and cycle. If the problem is with the GLF product, change the arrangement to "glf_combo_map." You should also delete the previous cycle so that the latest cycle doesn't populate from it.

3.   Repopulate the c-table As user ifps, cd to /awips/adapt/ifps/bin/linux and run the following command: ./make_default_combos.sh –s ccc –t YYYYMMDDCC –a cwf_combo_map \ -db ifps_ccc, where ccc is the 3 letter site id and YYYYMMDDCC is the current year, month, day, and cycle. Change the –a option to glf_combo_map if the problem is with the GLF product.

4.   Check the ifps-ccc.env file In the environment in the localbin directory, there is a variable called USE_SYNOPSIS. This should be set to 1 if a site wishes to insert a synopsis or outlook into the CWF or GLF product.